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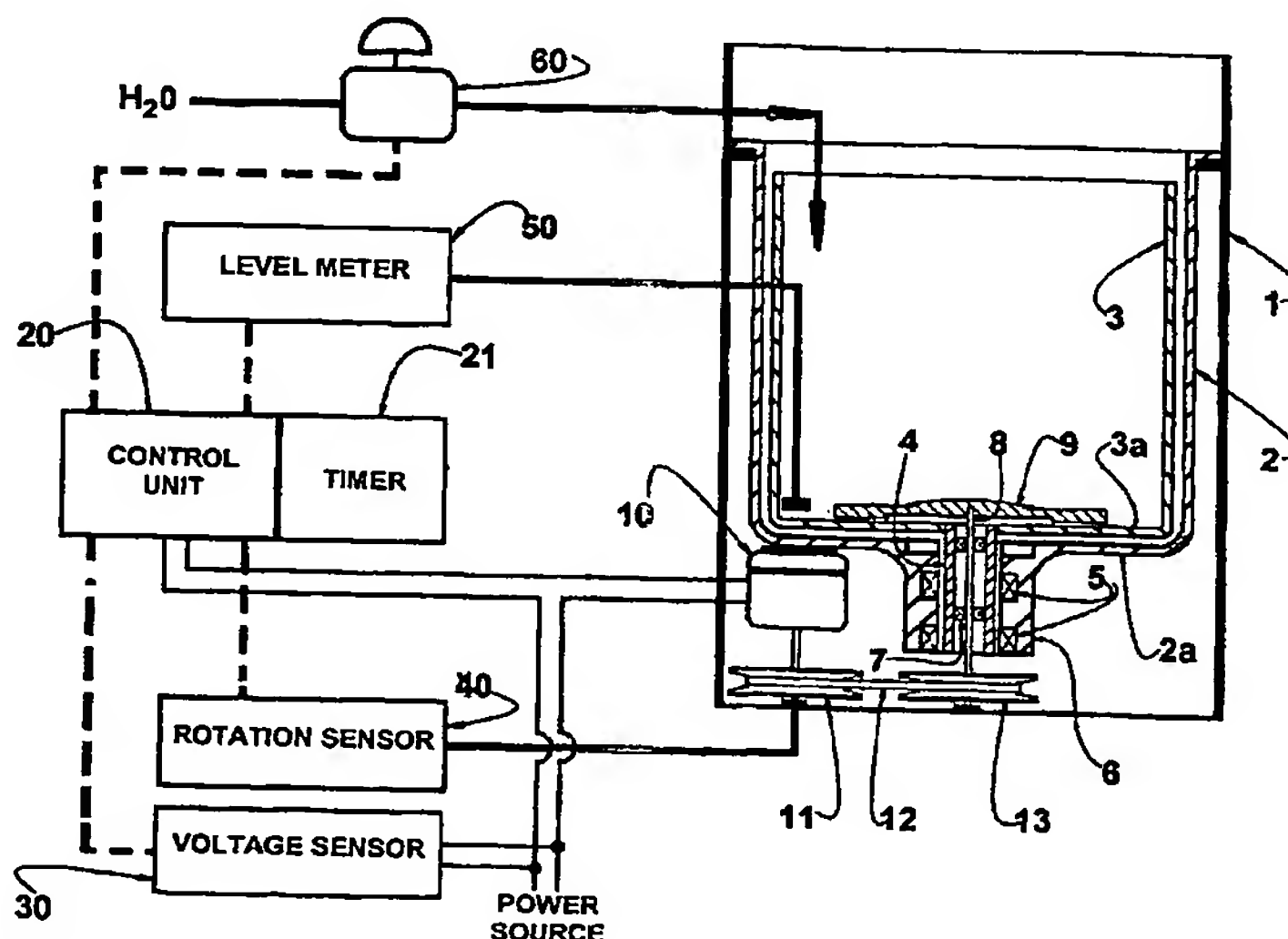
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(54) Title: SYSTEM AND PROCESS FOR DETECTING A LOAD OF CLOTHES IN AN AUTOMATIC LAUNDRY MACHINE



(57) Abstract: A system and a process for detecting a load of clothes in an automatic laundry machine, comprising a voltage sensor (30), a rotation sensor (40), and a control unit (20) which is supplied with data representative of the medium torque  $M_{mot}$  of the electric motor (10) in different voltage ranges and with data representative of acceleration and deceleration reference times ( $T_{a1}$  and  $T_{d1}$ ) of the electric motor (10) with the basket (3) in a unloaded condition and containing a load of clothes, between two distinct and predetermined rotation values of the electric motor (10), so as to calculate the moments of inertia ( $J_v$ ,  $J_c$ ) of the basket (3) in the unloaded and in the loaded conditions, said control unit (20) calculating the difference between said moments of inertia ( $J_c$  e  $J_v$ ) of the basket (3) and producing a signal representative of the mass of the load of clothes.

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